

Inorganic and Organic Chemistry

THE CHARACTERIZATION OF PROTON EXCHANGE MEMBRANE MONOMERS
THROUGH THE USE OF NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY

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Complete assignments of 1,1'-(p-Phenylenedioxy)bis[4-(4-fluorobenzoyl)benzene and sodium 2,5-Bis[(*p*-fluorobenzoyl)phenoxy]benzenesulfonate were determined through the use of one-dimensional and two-dimensional NMR. ¹H, ¹³C, DEPT-135, COSY, HMBC, and HMQC were all utilized in the determination of the assignments. The assignments were aided by the use of literature and proved that 1,1'-(p-Phenylenedioxy)bis[4-(4-fluorobenzoyl)benzene had indeed been monosulfonated on the most activated ring.